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10/561,539	02/28/2007	Hitoshi Suzuki	80319(302753)	9393
21874	7590	01/27/2011		
EDWARDS ANGELL PALMER & DODGE LLP			EXAMINER	
P.O. BOX 55874			BATTULA, PRADEEP CHOUDARY	
BOSTON, MA 02205				
		ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,539

Applicant(s)

SUZUKI ET AL.

Examiner

PRADEEP C. BATTULA

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens (U.S. 5,715,723) in view of Boyd.

In regards to Claim 9, Owens discloses a ring compression device that applies force on a periphery of a ring 93 (Column 4, Lines 38 – 40; Figures 3 & 4, Item 93) to thereby compress the ring and fix the ring on a mounting body 94 (Column 4, Lines 38 – 40; Figures 3 & 4, Item 94) placed inside the ring (Column 2, Lines 45 – 50), comprising: a non-rotatable substrate 10 (Column 2, Line 63 – 64; Figures 3 & 5, Item 10) having a central axis 90 (Column 3, Lines 15 – 17; Figures 3 & 5, Item 90); a plurality of longitudinal pressing members 50 (Column 2, Lines 63 – 65; Figure 2, Item 50) arranged on a first plane different from that of the substrate (Figure 3 shows Item 10 and 50 with 50 being above 10 and therefore being in planes vertically distant from one another) and radially around the central axis (Figure 2 shows an opening of the central axis and the pressing dies being radially around it), each of said pressing members having one end 53 pointing toward the central axis (Column 3, Lines 65 – 66; Figure 2; Figure 3, Item 53), the pressing members capable of freely moving toward or away from the central axis in the first plane (Column 3, Lines 55 – 67 → Column 4, Lines 1 – 14,

42 – 50 discusses the cam surfaces and openings so that the dies move toward and away from the central axis in the first plane); a rotating body 20 configured to rotate around the central axis in second plane that is parallel to the first plane (Column 3, Lines 55 – 66; Figure 3, Items 10, 20, 50 show that the bottom portion of 20 next to the substrate and below dies 50. This bottom portion and the horizontal plane it lies is above the plane of the substrate [on its bottom surface] and below the bottom plane of the pressing members); and a driving mechanism having cam followers respectively provided on the pressing members 52 (Column 3, Lines 65 – 66; Figure 1, Item 52) and cam holes 21 formed in the rotating body and respectively engaged with the cam followers (Column 3, Lines 59 - 62 discusses cam holes 21 in the body 20; Figures 2 & 3, Items 20, 21), the driving mechanism being configured to integrally move, along with the rotation of the rotating body in one direction, that engages with the rotating body and the pressing members such that when the rotating body rotates, all of the pressing members integrally move toward the central axis and apply force on the periphery of the ring with the one end of each of the pressing members (Column 4, Lines 42 – 50; Figure 2 shows the holes only in one direction and only one movement of the driving means when actuated by the rotating body and motor) and a movable claw member abutting an edge face of the ring on each pressing member (Column 3, Lines 65 – 66; Figure 2; Figure 3, Item 53 discusses a tooth end which can be considered a claw).

Owens does not disclose a hooking mechanism that hooks the ring, the hooking mechanism having a claw member abutting on an edge face on one side of the ring on the side of the substrate. As discussed above it is shown a movable claw member

abutting on an edge face on the other side of the ring on the tip side of the specific pressing member since each pressing member is movable and has a claw and will be opposed any type of hooking member that would be on the side of the substrate.

Boyd teaches of a coupler wherein to support the coupling two supports *m* on opposite sides from one another hold the coupling when the compression is to take place (Page 1, Lines 79 – 89; Figure 2, Item *m*). Furthermore considering that they project beyond the inner faces of the pressing members *d*, there will be some sort of hooking since it is holding the pipe in place (Figure 2, Item *m* shows the extension beyond the pressing member and this can be considered on the side of the substrate since no frame or reference or particular coupling has been claimed). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Owens with the same member as Boyd in order to provide a support for the coupling of the object and ring to be compressed around it (Page 1, Lines 79 – 89).

In regards to Claim 10, Owens modified by Boyd further discloses wherein the rotating body has an initial position at which the one end of at least one of the pressing members is located on a circle around the central axis that corresponds to the periphery of the ring and the one end of each of the other pressing members is located outside of the circle (Figure 1 shows the uncrimped position which shows the ends of the pressing members being arranged circumferentially around and outside the central axis and since it is circumferential it corresponds to the periphery of the ring), and the driving mechanism engages with the rotating body and the pressing members such that, when

the rotating body rotates, the one end of each of the other pressing members moves toward the circle, and once the one end of each of the other pressing members is located on the circle, all the pressing members move towards the central axis (Figure 2 shows the actual movement and (Column 3, Lines 55 – 67 → Column 4, Lines 1 – 14, 42 – 50 discusses this movement with the driving means).

In regards to Claim 10, Owens modified by Boyd further discloses wherein, in an initial state, the one end of at least one of the pressing members is located on a circle with the central axis as a center and diameter of the ring as a diameter, and the one end of each of the other pressing members is located outside of the circle (Column 2, Lines 29 - 30 and Figures 1 & 3 show the pressing members are in an uncrimped position and show that the pressing members are outside the center, diameter, and central axis of the ring since it is not compressed), wherein the driving mechanism engages with the rotating body and the pressing members such that, when the rotating body rotates, the one end of each of the other pressing members moves toward the circle, and once the one end of the other pressing members is located on the circle, all the pressing members move towards the central axis (Column 2, Lines 31 – 32 and Figures 2 & 4 shows that the pressing members are crimped and shows the ring being pressed and the pressing members located on the circle and towards the central axis; Column 3, Lines 55 – 67 → Column 4, Lines 1 – 14, 42 – 50 discusses this movement with the driving means).

Owens modified by Boyd further discloses the device further comprising a holding mechanism configured to hold the mounting body in such a manner that the

mounting body is aligned to the central axis (Page 1, Lines 79 – 89 of Boyd teaches that the supports are placed at spaced intervals and Figure 2 shows that more than 2 can be used. One can consider one set the hooks and the other set being the holding mechanism).

In regards to Claim 13, please review the rejections of Claims 9 – 12 where the limitations combined will meet that of Claim 13.

In regards to Claim 14, please review the rejections of Claims 9 – 12 where most of the limitations have been discussed except for the holding mechanism in relation to the substrate. With respect to the limitation of the claw abutting an edge face on the side of the ring on the side of the substrate Boyd further states in Page 1, Lines 79 – 89 that the supports/hooks mechanisms are placed at spaced intervals and can be in several places as seen in Figure 2. The hooking mechanism on the same side of the substrate is just a matter of placement on particular pressing members.

In regards to Claims 15 and 16, Owens modified by Boyd discloses the limitations as seen in Claims 9 – 14. Furthermore, with respect to the controlling of Claim 16, please review the discussion of Boyd in the previously cited claims where it is discussed that Boyd's supports can exist on several pressing members.

Response to Arguments

Applicant's arguments with respect to claims 9 – 16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRADEEP C. BATTULA whose telephone number is (571)272-2142. The examiner can normally be reached on Mon. - Thurs. & alternating Fri. 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on 571-272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C. B./
Examiner, Art Unit 3725
January 21, 2011

/Dana Ross/
Supervisory Patent Examiner, Art
Unit 3725